Sustainable Development on Federal Facilities

ARMS Model Proves an Alternative to Base Closure

RAND H. FISHBEIN, PH.D.

he United States has long regarded its domestic military installations as more than just compounds in which to house, equip, and train its soldiers. For over two centuries they have served as model cities—foundries of excellence, where the best of American industry, manpower, and technology have organized for war.

All of this began to change in the last quarter of the 20th Century with the advent of high-mobility warfare, forward pre-positioning, and stand-off munitions. Overnight, Pentagon planners began to question the utility of many of the Department's approximately 519 domestic installations, preferring to see them as costly relics of a bygone age rather than as pearls woven into the fabric of our national defense. With every cut in force structure, and every improvement in strategic air and sealift, their purpose seemed to diminish.

Strategic Inflection Point

Then came the events of September 11, 2001. As America mobilizes for what could be a protracted war against terrorism, the need for superior military infrastructure is once again becoming evident. Many in Congress now see the nation's defense installations as key components of homeland security and as vital elements in sustained power projection. This new attitude was most clearly reflected in the FY 2002 National

Defense Authorization Act, which postponed any decision on future base closures until 2005.

Even so, there are those Pentagon planners who persist in the belief that continued DoD control over vast swathes of real estate represents little more than an expensive exercise in nostalgia. At a cost of billions of dollars annually in operations and maintenance funding, just the upkeep of this infrastructure, extending over some 25 million acres, represents a huge drain on the cash-strapped DoD. Even with an increase in defense spending in 2003, the cost of infrastructure maintenance and modernization is skyrocketing.

In pressing for another round of base closures, Pentagon planners argue that at least a quarter of the nation's remaining military installations are redundant. Retain them, they say, and the Department will be unable to muster the funding necessary to pay for everything from equipment modernization and spare parts to much-needed qual-

ity-of-life improvements for the nation's 1.4 million active duty servicemembers.

Assets. Not Liabilities

While DoD's budget concerns are well-founded, the reality surrounding base closures is something quite different. In-

Commercial welding operation conducted by Entech, a commercial tenant at the Mississippi Army Ammunition Plan (MSAAP). Photos courtesy MSAAP

stead of being liabilities, America's vast collage of military installations are, in actuality, assets. If carefully nurtured, prudently funded, and creatively managed, many can be transformed into revenue centers for a cash-starved military or serve as host sites for other federal.

Fishbein is President of Fishbein Associates, Inc., a public-policy consulting firm based in Potomac, Md. He is a former Professional Staff Member (Majority) of the Senate Defense Appropriations Subcommittee, where he conceived of and authored the Armament Retooling and Manufacturing Support (ARMS) Act along with numerous other programs that benefit military readiness. Fishbein also served as a Professional Staff Member (Majority) of the U.S. Senate Foreign Operations Appropriations Subcommittee and as Special Assistant for National Security Affairs to Senator Daniel K. Inouye (D-Hawaii). He holds a Ph.D., with distinction, from The Johns Hopkins University Paul H. Nitze School of Advanced International Studies, and was the recipient of two Fulbright fellowships to Oxford University and the University of London.



dowments and manpower, is central to developing a reuse plan that allows commercial business to coexist, side-by-side, with the military mission.

Creative solutions are already being implemented throughout the DoD. Many, like facility use contracting, consideration-for-use, enhanced lease authority, Cooperative Research and Development Agreements (CRADA), the rehabilitation tax credit, and the Residential Communities Initiative (RCI), have shown great promise in tests run by installation commanders across the nation

What is needed now is for the Department of Defense to embrace the full range of public-private partnership strategies to make military infrastructure not just affordable, but profitable as well.

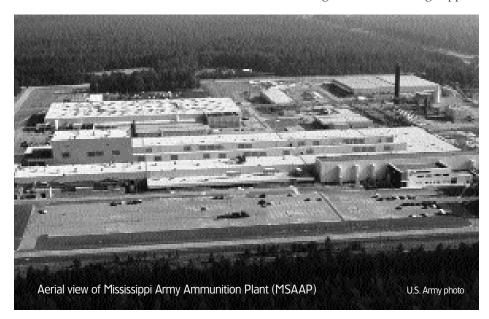
The ARMS Alternative

Perhaps the most successful of these public-private partnership strategies is the Army's Armament Retooling and Manufacturing Support

The program is run by an eight-person ARMS Team belonging to the Army's Operations Support Command (OSC), in Rock Island. Ill. A 16-member ARMS Public-Private Task Force (PPTF), Executive Advisory Committee (EAC), appointed by the Army to represent each of the primary stakeholder interests, is chartered to oversee the operation of the program. The EAC reports directly to the Secretary of the Army on how the operational efficiency of the initiative might be improved.

Understanding the potential of military installations, including their native endowments and manpower, is central to developing a reuse plan that allows commercial business to co-exist. side-by-side, with the military mission.

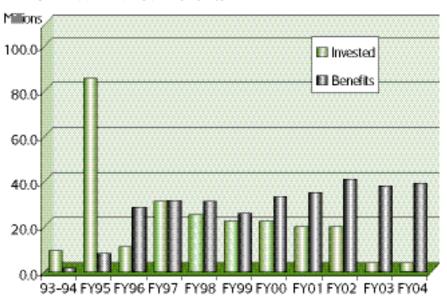
The ARMS mission is to evolve off-budget methods for funding all, or part of, the cost centers at a given installation. Principal among these cost centers are: maintenance and repair, environmental compliance and remediation, facility modernization, historic preservation, and in some instances, pension and personnel benefits. A flexible, innovative, market-driven orientation is to guide all activities overseen by the installation commander.



state, or local governments' activities. The key is sustainable development. The goal is recapitalization.

Understanding the potential of military installations, including their native en(ARMS) initiative. Enacted into law in 1992, ARMS is spearheading a revolution in facility reuse by demonstrating how active, inactive, and even excess installations can be made largely self-financing.

ARMS Annual Financial Benefits



In a remarkable turn of fortune, ARMS has taken declining Army installations and transformed them into engines of economic opportunity.

ARMS was established by Congress in 1992 as a way of saving the Government-owned, Contractor-operated (GOCO) ammunition base from complete collapse. By 1992, ammunition appropriations had fallen by well over 70 percent in just eight years, triggering widespread layoffs and sparking a series of plant closures.

As the single manager for conventional ammunition, the Army suddenly found itself short of not only procurement dollars, but of the funds needed to maintain its vast network of in-house explosives; metal parts; and Load, Assembly

and Packing (LAP) plants. Most of these plants dated to World War II and were in dire need of modernization in both production as well as Occupational Safety and Health Administration (OSHA) compliance.

In creating ARMS, Congress intended that the program serve as a model for the reuse of federal facilities across the Federal Government. Within a few years of its establishment, ARMS was being adapted across a wide range of mission areas, including Army aviation, arsenals, and depot maintenance facilities. Much of what the Air Force is doing in its City Base initiative at Brooks Air Force Base, and the Department of Energy (DoE) in its development of the Site Transition and Reuse (STAR) initiative, takes its inspiration from the pioneering efforts of ARMS.

Innovative Asset Management Techniques

What makes the ARMS program unique is that it utilizes a range of financial and real estate tools to catalyze sustainable development on Army facilities. This means not only a reduced reliance on appropriated funds, but the employment of enlightened management practices that provide for renewable sources of off-budget income.

ARMS has accomplished this by encouraging commercial companies to set

up operations on Army installations where they can take advantage of their industrial infrastructure, vast covered areas, a trained workforce, secure warehousing, equipment availability, and location to create jobs and generate revenue that can supplement, or in some cases replace, congressional appropriations for Base Operation Support (BOS).

Key to ARMS' success is the active involvement of the operating contractor in marketing, developing, and administering each plant site. A facility use contract makes this possible.

A facility use agreement is not a production contract. Instead, it functions as a no-cost services contract that permits a contractor to utilize the assets at an Army ammunition plant to maximize its commercial potential, but within parameters established by the Army for readiness and safety.

A series of incentives built into the contract help to ensure that the contractor will work to maximize the revenue-generating potential of the facility and thereby help to offset the cost of government ownership. Contractors are entitled to annual performance incentives if they reach certain economic targets.

Typically, facility contractors make use of a variety of methods to meet their revenue targets: tenant lease payments, asset sales, the marketing of services, access fees, equity partnerships, income derived from a percent of tenant product sales, or the more intensive use of the site by the facility contractor. Marketing of the site is the responsibility of the operating contractor.

Under a facility use agreement, none of the funds paid to the plant contractor are transferred to the Army. Instead, the Army receives its consideration in the form of "in-kind" credits against which an installation commander can direct that work be performed by the facility contractor. At the start of each year, the facility contractor and the commander negotiate a work plan based upon projected commercial revenue, less any fees or profit to which the facility contractor is entitled.

This process boasts several advantages. First, expenditures by the base commander do not count against the Army's budget authority ceiling. Second, work orders can be executed quickly and according to the priority needs of the base commander. And third, all revenue earned at an installation remains available to that installation and is not automatically turned over to the Miscellaneous Receipts account in the Department of the Treasury.

Typically, Army work orders would cover the general maintenance and improvement of the facility, but they also could include job training as well as environmental compliance and remediation activities

Generally, the cost to the Army of administering the ARMS program is minimal, running at less than 1 percent of its funded amount since its establishment.

Supporting Commercial Diversity

Today, the 10 ARMS plants support a wide variety of tenant activities, from fish farming and rocket motor assembly to the manufacture of marine winches, transporters for the Space Shuttle external fuel tanks, and tool joints for the off-shore oil industry.

With over 141,000 acres of land, 600 miles of rail, and 10,000 buildings comprising over 31 million feet of covered space, the GOCO ammunition base is a formidable industrial complex. Its diverse infrastructure supports an array of production equipment for hoisting, forging, heat treating, calibrating, materials testing, pollution control and disposal, repair and maintenance, computation, and administrative support.

Today, due in large part to ARMS, Army installations are home to a wide assortment of business enterprises. These include one of the nation's largest fireworks producers, a food caterer, a wood waste recycler, a furniture refinisher, and

a building materials distributor. There are companies engaged in rail car and RV storage and food dehydration. At various times, ARMS plants have hosted mushroom farmers, textile processors, and even pickle packers.

Other tenants are involved in the manufacture of pollution control and nut processing equipment, the production of moldings and fiberboard products, and the operation of a propane tank farm. One plant even plans to welcome artisans crafting specialty glass products.

Under the ARMS Act, small and minority-owned businesses are encouraged to set up operations alongside large anchor tenants. There now are approximately 191 business tenants operating at GOCO ammunition plants of which about 125 are small businesses.

All of these non-government business activities are carried out symbiotically with their plant's military mission.

Reducing The Cost Of Ownership

So efficient is the ARMS process that the program has been able to reduce the cost to the Army of certain types of ammunition and explosives by upwards of 18 percent, due entirely to the absorption of overhead costs by on-site commercial business.

ARMS has led to other efficiencies as well. It has brought about a streamlining in Army contracting procedure, resulting in faster processing times for contract approvals. The ARMS Team has pledged a 3- to 5-day turnaround for initial proposal inquiries. Under ARMS, numerous waivers and deviations from Federal Acquisition Regulation (FAR) restrictions have been obtained, as well as statutory amendments that have granted even greater authority to program managers.

For instance, the delegation of authority under 10 U.S.C. 2692 from the Secretary of the Army to the Major Command (MACOMs) has lessened significantly the time needed to decide whether non-government hazardous waste may be transported onto a gov-

ernment installation for reprocessing. This is a growing business niche for the companies wishing to use DoD facilities, since the Department has some of the most advanced environmental treatment facilities in the country.

In just seven years (1993-2000), ARMS generated \$3 billion in economic output and created over 3,400 jobs. The program has generated \$160 million in savings to the Army resulting in \$134

The Army's
Armament
Retooling and
Manufacturing
Support (ARMS)
Initiative is
spearheading a
revolution in facility
reuse by
demonstrating how
active, inactive, and
even excess
installations can be
made largely selffinancing.

million in savings to the government according to a recent study by Pricewaterhouse Coopers (PwC).

In its analyses of the ARMS program, PwC defines the term, "Savings to the Army" as "(Rent shared with Army/Government) plus (Overhead absorbed by ARMS investments and incentives) plus (Overhead absorbed by ARMS tenants) plus (Services performed by ARMS ten-

ants in lieu of rent)." PwC defines the term, "Savings to the Government" as "(Rent shared with Army/Government) plus (Overhead absorbed by ARMS tenants) plus (Services performed by ARMS tenants in lieu of rent)."

Since its inception, ARMS has made investments or provided targeted incentives totaling \$206 million. Yet unlike many other government defense conversion or community transition initiatives, ARMS has been able to recoup all of its expenditures within just six years. All funds outlayed by ARMS are fully and completely repaid to the taxpayer.

In a remarkable turn of fortune, ARMS has taken declining Army installations and transformed them into engines of economic opportunity. Since its inception, ARMS has been responsible for an increase in tenant employment of 23 percent per year. This translates into a growth rate of 15 percent per annum in the rent paid by ARMS tenants back to the program.

PwC concluded in May, 2000:

"The business case shows that the Armament Retooling and Manufacturing Support (ARMS) Program is an economically sound program that reduces the overall ownership costs of the government facilities."

Best Practices

In developing ARMS, its proponents have incorporated many of the best business practices recommended by the National Performance Review (NPR), the Defense Reform Initiative (DRI), the 1997 National Defense Panel (NDP), the General Services Administration (GSA), the Defense Science Board (DSB), the directives promulgated by Dr. Jacques S. Gansler, former Under Secretary of Defense (Acquisition, Technology and Logistics), and others. Examples of ARMS best business practices abound:

Planning. All commercial reuse activities are based upon a strategic plan drawn up for each facility. Business plans, feasibility, engineering, and mar-

keting plans help to ensure the highest and best use for both plant and equipment

Marketing. An ARMS national marketing program uniformly promotes the reuse opportunities at each of the Army plants through the program Web site (www.OpEnterprise.com), newsletter, brochures, trade show representation, and national workshops.

Incentive Funding. ARMS may extend to tenants immediate use funding, bridge funding, funding for environmental baseline studies, equipment relocation, space reconfiguration, pre-contract costs, and other incentive funding to promote on-site business activity.

Contract Length. Long-term occupancy contracts of up to 25 years may be used by tenants as collateral in securing private sector business loans.

Pricing. Rates for the use of a facility or its assets are set at the prevailing market rate. To remain competitive with commercial industrial parks, facility contractors are free to negotiate terms favorable to both parties.

Equipment. Tenants may have access to both excess government equipment and equipment with a designated replenishment mission under conditions that ensure its availability in the event of mobilization.

Asset/Service Sales. ARMS empowers the facility contractor to raise revenue through the sale of the plant's renewable assets, including water and electricity, or plant services such as fire, security, clerical, grounds, equipment maintenance, laboratory, etc.

Deregulation. In keeping with Presidential Order EO12861, the Army is moving to waive or repeal regulations that pose an unnecessary impediment to timely and efficient commercialization.

Inter-Servicing. The Army hosts other federal agencies, both DoD and non-DoD, at its ARMS sites on a reimbursable basis.

Accountability. ARMS works closely with the Army Audit Agency (AAA), the U.S. General Accounting Office (GAO), and private accounting firms to ensure full program transparency.

Metrics. The ARMS Public-Private Task Force provides regular assessments of the program's performance against both independent and baseline measures.

Partnering. ARMS contractors are encouraged to work with local communities, local reuse authorities (LRAs), and state economic development agencies to leverage federal business incentives and coordinate redevelopment efforts.

A Win-Win Situation

Today, ARMS is leading the way in the transformation of the U.S. Army. It also is providing new hope for local communities that have suffered from the retrenchment of the U.S. military following the end of the Cold War. For those that had been solely dependent upon ammunition production for jobs and the tax revenue they generated, ARMS has quite literally given them a new lease on life.

Indeed, there is no reason why other communities, with military installations having nothing to do with ammunition, could not also enjoy a similar renaissance using the techniques pioneered by ARMS.

In contrast to the Base Realignment and Closure (BRAC) process that looks to disposing of military properties that are either under-utilized or too costly to retain, the ARMS model provides an avenue for sustainable development. Instead of discarding valuable federal land, ARMS makes it possible to preserve it for future generations of Americans.

This is important because military land, and the facilities it supports, is a diminishing national resource. In an age of rapidly changing defense doctrine, technologies, and manufacturing processes, it is impossible to predict what needs might arise in the future.

Many of the ammunition sites, for instance, possess valuable environmen-

tal permits that would be unobtainable if sought today. As the Navy has learned from its experience on Vieques, Puerto Rico; Kahoolawe, Hawaii; the Air Force in the Philippines and Okinawa; and the Army at the National Training Center, Calif., military land is a precious commodity that is not easily replaced. The nation's security could well depend on its timely availability in peace and

What is often overlooked is that the value of military land can be significantly enhanced through the preservation of a skilled workforce, the establishment of business development centers and extension services, the creation of foreign export processing zones, the operation of high-technology incubators, and partnering with local academic institutions to provide opportunities for continuing education.

Moreover, the ARMS model can be supplemented by a host of arrangements, already authorized in law, to boost commercial opportunity and command flexibility. These include such mechanisms as: CRADAs, leases authorized under 10 U.S.C. 2667, enhanced leases, and joint ventures.

The success of ARMS rests largely on its ability to stimulate private sector investment on the government facilities where it operates. Banks are willing to extend financing to companies based upon their overall credit worthiness, promised access to government plant and capital equipment, and in some cases, the backing of an ARMS loan guarantee, which can run to 85 percent of the borrowed amount.

So far, the ARMS model has been extensively tested at 10 Army ammunition plants. Of these, six have achieved full self-sufficiency, operating at no cost to the Federal Government and generating revenue in excess of their overhead expenses. This is the first time in modern U.S. history that Department of Defense facilities have operated effectively off-budget.

In addition to six reviews conducted by PwC, the results of the ARMS program have been amply documented in numerous independent evaluations by the Army Audit Agency (AAA), the U.S. General Accounting Office (GAO), Pacific National Northwest Laboratory (PNNL), the U.S. Army Cost and Economic Analysis Center, and the defense committees of Congress.

What ARMS continues to demonstrate is that with a little imagination and a clear commitment from the Pentagon leadership to realize the full commercial potential of its installations, many can serve once again as bastions of military readiness while providing local communities and the nation with new opportunities for economic growth and renewal. Stated another PwC ARMS evaluation:

What is needed now is for the Department of Defense to embrace the full range of public-private partnership strategies to make military infrastructure not just affordable, but profitable as well.

Our analysis concludes that the ARMS Initiative, if applied correctly on a longterm basis, could reduce the excessive costs of defense downsizing faced by the government in the wake of a reduced threat to national security. Remediation expenditures could be planned and budgeted to achieve a far less negative impact on the DoD's annual budget. Streams of tenant revenue could be more effectively managed if ARMS continued operation ... At a minimum, renewal of the program's mandate and increased funding will guarantee nothing less than a continuance of the remarkable momentum established by ARMS in its historic infancy, with confidence in its ability to deliver future benefits to all of its stakeholders.

Editor's Note: The author welcomes questions or comments on this article. Contact him at **fishnet@pipeline.com**.

WYNNE ANNOUNCES AT&L Organizational Changes

n a Sept. 18 memorandum to OUSD(AT&L) Principal Staff Assistants and the Director, Defense Threat Reduction Agency, Michael Wynne, Principal Deputy Under Secretary of Defense (AT&L) announced the following senior leadership changes:

- Deidre Lee, formerly the Director, Defense Procurement, is now assigned as the Director, Defense Procurement and Acquisition Policy.
- Donna Richbourg, formerly the Director, Acquisition Initiatives, is now assigned as Principal Deputy to the Director, Defense Procurement and Acquisition Policy. She is also dual-hatted as the Director for Acquisition Workforce Management and Training.